Abstract of the Disclosure

This invention provides a more effective method for capacity planning and traffic engineering of packet networks that connect Virtual Private Network (VPN) sites. A distributed architecture efficiently computes traffic matrixes that show the number of bytes and/or packets exchanged among provider edge (PE) routers and/or service nodes. Each PE router in a service node is exports flow records to a Flow Record Processor (FRP) in the same location. The FRPs use these records in conjunction with configuration data extracted from the PE routers to compute partial traffic matrixes. The partial traffic matrixes are uploaded to a Matrix Generator to create a total traffic matrix. The total traffic matrix is essential input for capacity planning or traffic engineering tools.